WHAT IS CLAIMED IS:

1. An image input apparatus including a camera means for inputting an image of an object, comprising:

detection means for detecting a change cycle of an intensity of an external light inputted to said camera means;

timing control means for synchronizing the change cycle of the intensity of the external light with a plurality of input timings of said camera means;

evaluation means for evaluating an influence of the external light inputted to said camera means at each of the plurality of input timings; and

selection means for selecting one of the input timings whose influence of the external light is smallest from all input timings.

2. The image input apparatus according to claim 1,

further comprising an emission means for emitting light to the object, and

wherein said camera means inputs the image of the object at two times, and said emission means emits the light to the object in synchronization with one of the two times.

3. The image input apparatus according to claim 2,

wherein said camera means calculates a difference between two images inputted at the two times as a reflected light image of the object by the light from said emission means.

4. The image input apparatus according to claim 2, wherein said emission means does not emit light during a measurement mode of the external light.

5. The image input apparatus according to claim 1, wherein said evaluation means compares each storage quantity of the external light inputted to said camera means at each of the plurality of input timings, and

wherein said selection means selects one of the input timings whose difference of the storage quantities of the external light is smallest from all input timings.

6. The image input apparatus according to claim 2, wherein said timing control means repeatedly synchronizes the term of the two input timings with the change cycle of the external light by shifting the term into the change cycle by a unit of predetermined phase difference.

7. The image input apparatus according to claim 6, wherein said evaluation means calculates a difference

between two storage quantiti s of the external light inputted at the two input timings whenever the term of the two input timings is synchronized with the change cycle.

8. The image input apparatus according to claim 7, wherein said evaluation means selects one difference which is smallest from all differences when calculation of the difference is completed for all shifted terms.

9. The image input apparatus according to claim 8, - wherein said camera means inputs two images at the two input timings of the term synchronized with the change cycle as the phase difference selected by said selection means in a normal operation mode.

10. The image input apparatus according to claim 7, wherein said evaluation means evaluates one storage quantity of the external light inputted at one of the two input timings whenever the term of the two input timings is synchronized with the change cycle, and selects one difference if the one difference is smallest in all differences and the one storage quantity from which the one difference is calculated is below a threshold.

11. An image input method in a camera system for inputting an image of an object, comprising the steps of:

detecting a change cycle of an intensity of an external light inputted to said camera system;

synchronizing the change cycle of the intensity of the external light with a plurality of input timings of said camera system;

evaluating an influence of the external light inputted to said camera system at each of the plurality of input timings; and

selecting one of the input timings whose influence of the external light is smallest from all input timings.

12. The image input method according to claim 11, further comprising the step of:

emitting a light to the object in synchronization with one of two times when said camera system inputs the image of the object.

13. The image input method according to claim 12, wherein said camera system calculates a difference between two images inputted at the two times as a reflected light image of the object by the emitted light.

14. The image input method according to claim 12, further comprising the step of:

stopping the emission of the light during a measurement mode of the external light.

15. The image input method according to claim 11, further comprising the steps of:

comparing each storage quantity of the external light inputted to said camera system at each of the plurality of input timings, and

selecting one of the input timings whose difference of the storage quantities of the external light is smallest from all input timings.

16. The image input method according to claim 12, further comprising the step of:

repeatedly synchronizing the term of the two input timings with the change cycle of the external light by shifting the term into the change cycle by a unit of predetermined pulse difference.

17. The image input method according to claim 16, further comprising the step of:

calculating a difference between two storage quantities of the external light inputted at the two input timings whenever the term of the two input timings is synchronized with the change cycle.

18. The image input method according to claim 17, further comprising the step of:

selecting on difference which is small st from all differences when calculation of the difference is completed for all shifted terms.

19. The image input method according to claim 18, wherein said camera system inputs two images at the two input timings of the term synchronized with the change cycle as the phase difference selected in a normal operation mode.

20. The image input method according to claim 17, further comprising the steps of:

evaluating one storage quantity of the external light inputted at one of the two input timings whenever the term of the two input timings is synchronized with the change cycle; and

selecting one difference if the one difference is smallest in all difference and the one storage quantity from which the one difference is calculated is below a threshold.

21. A computer readable memory in a camera system for inputting an image of an object, comprising:

instruction means for causing a computer to detect a change cycle of an intensity of an external light inputted to said camera system;

instruction means for causing a computer to synchronize the change cycle of the intensity of the external light with a plurality of input timings of said camera system;

instruction means for causing a computer to evaluate an influence of the external light inputted to said camera system at each of the plurality of input timings; and

instruction means for causing a computer to select one of the input timings whose influence of the external light is smallest from all input timings.